TABLE1

Sample No.	W	ρ (Mg/m^3)	Br (T)	H_{cJ} (kA/m)	$(BH)_{max}$ (kJ/m^3)	Br/ρ ($x10^{-6}T \cdot m^3/g$)	χ_{irr} ($x10^{-7}H/m$)	Irreversible Flux Loss (%)
1 (Comp.Ex.)	0.1	6.27	0.83	345	75.6	0.132	7.5	-6.5
2 (This Invention)	0.2	6.26	0.87	415	104.8	0.139	4.8	-4.7
3 (This Invention)	0.5	6.32	0.90	478	113.2	0.142	3.7	-4.0
4 (This Invention)	1.2	6.29	0.92	496	115.9	0.146	3.2	-3.6
5 (This Invention)	2.5	6.30	0.90	530	112.0	0.143	3.0	-3.2
6 (This Invention)	3.3	6.33	0.81	561	102.7	0.128	2.7	-2.7
7 (Comp.Ex.)	3.6	6.31	0.76	553	79.1	0.120	3.3	-3.5

TABLE2

Sample No.	Kneading Temp. (℃)	Molding Method	Molding Temp. (℃)	ρ (Mg/m^3)	Br (T)	H_{cJ} (kA/m)	$(BH)_{max}$ (kJ/m^3)	Br/ρ ($\times 10^{-6} T \cdot m^3/g$)	χ_{irr} ($\times 10^{-7} H/m$)	Irreversible Flux Loss (%)
8 (This Invention)	200	Injection Molding	230	5.30	0.78	563	83.4	0.147	2.1	-2.2
9 (This Invention)	203	Injection Molding	245	5.50	0.80	551	88.3	0.146	2.3	-2.5
10 (This Invention)	211	Injection Molding	260	5.67	0.82	542	92.6	0.145	2.5	-2.9
11 (This Invention)	216	Injection Molding	275	5.80	0.84	535	96.2	0.144	2.7	-3.1
12 (This Invention)	220	Compaction Molding	210	5.95	0.85	531	100.5	0.143	2.9	-3.4
13 (This Invention)	224	Compaction Molding	215	6.21	0.88	517	108.8	0.142	3.2	-3.7
14 (This Invention)	230	Compaction Molding	220	6.48	0.92	510	118.4	0.142	3.8	-4.2

Fig. 1

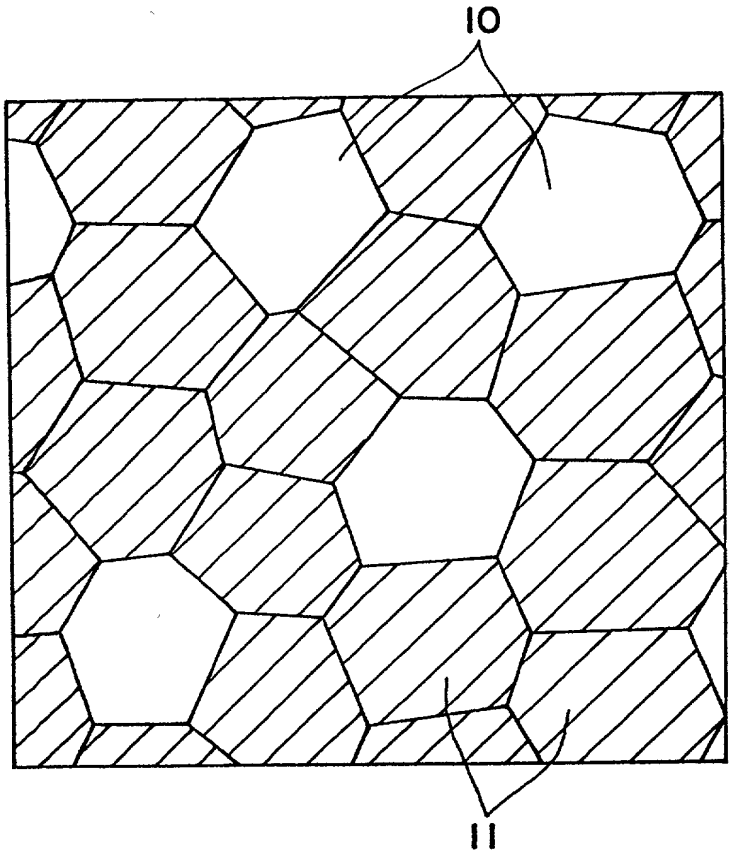


Fig. 2

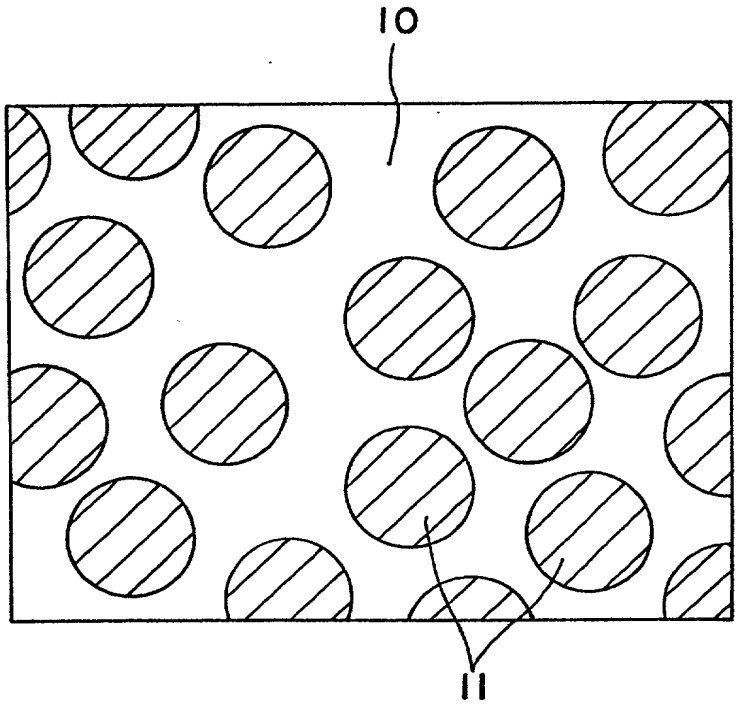


Fig. 3

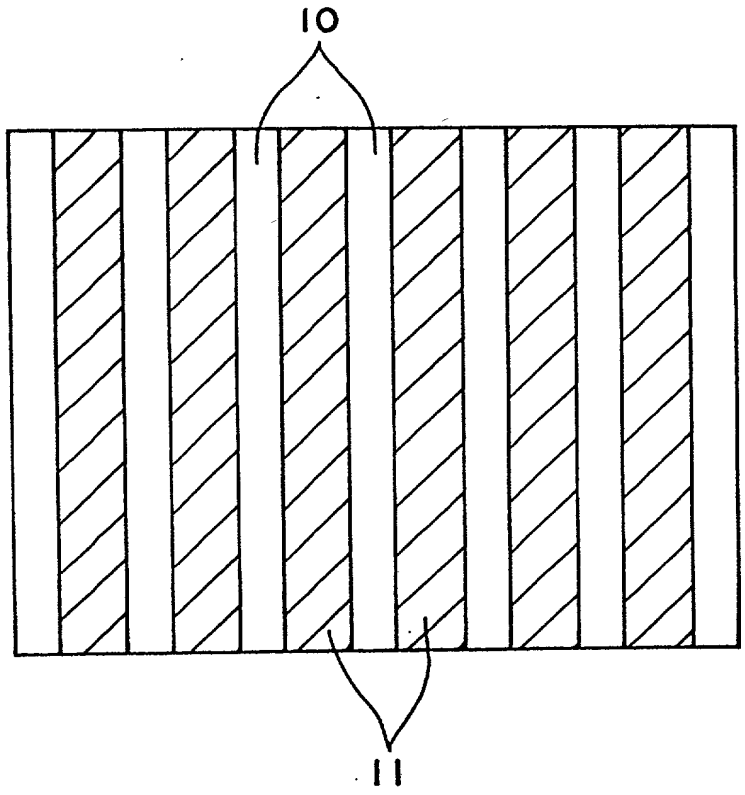


Fig. 4

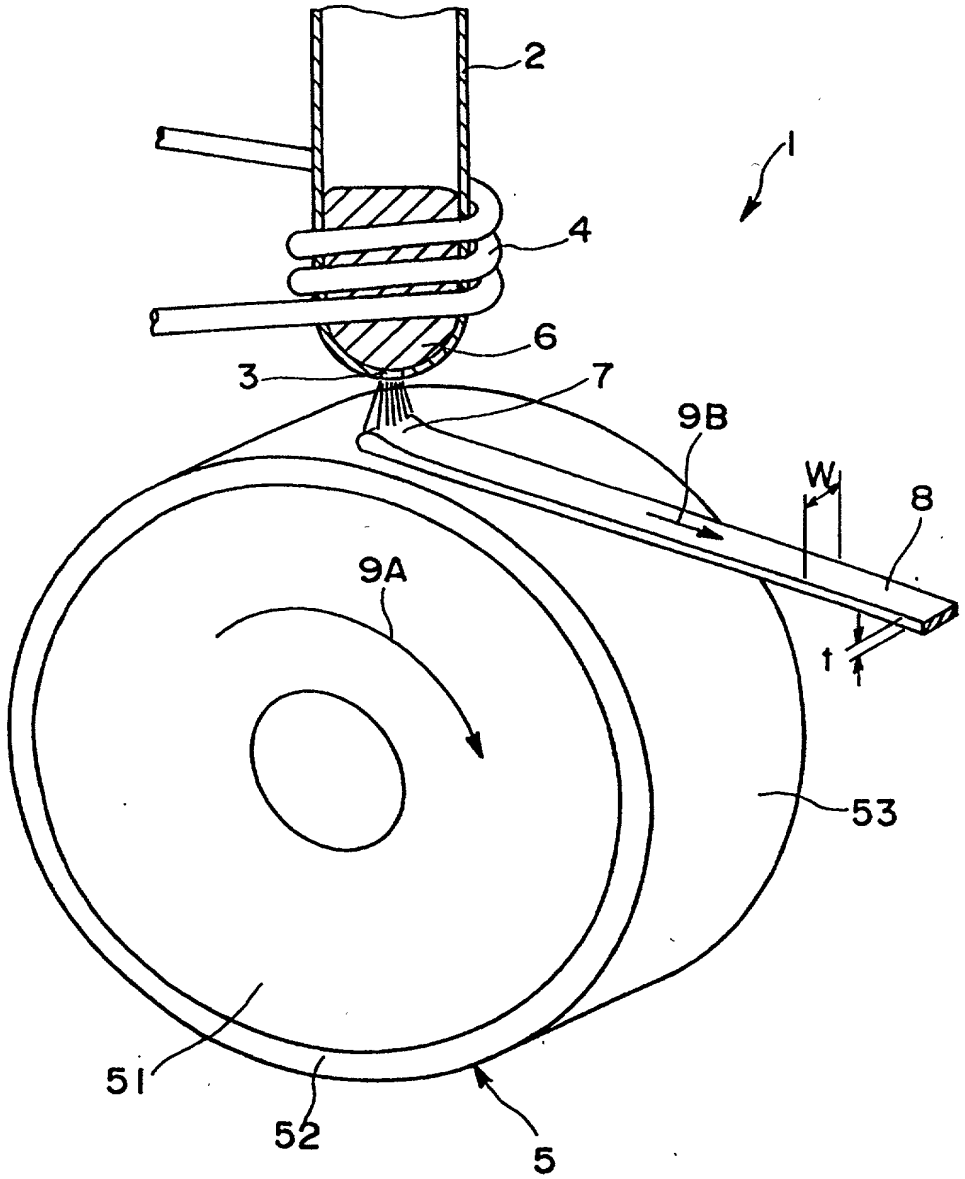


Fig. 5

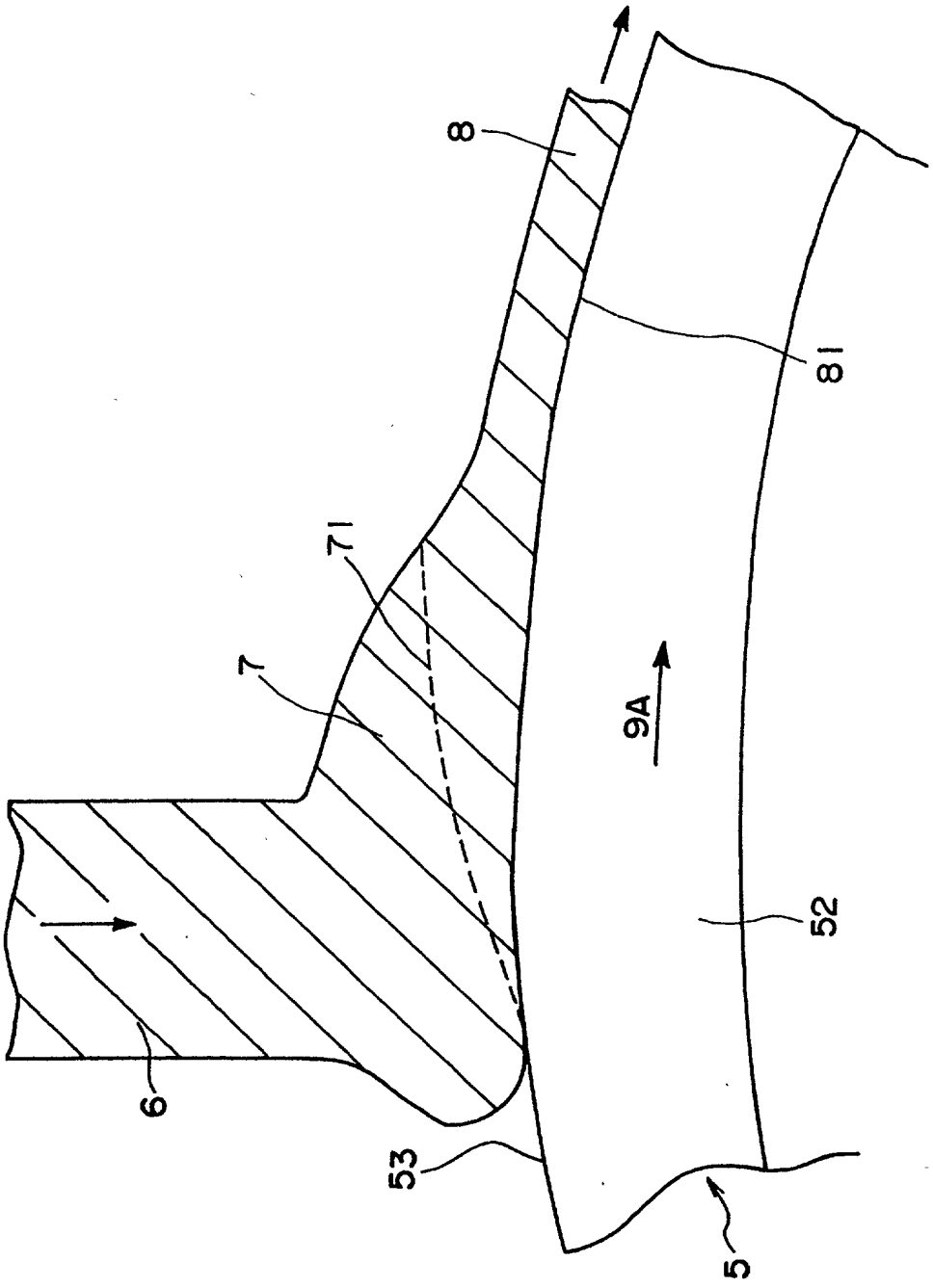


Fig. 6

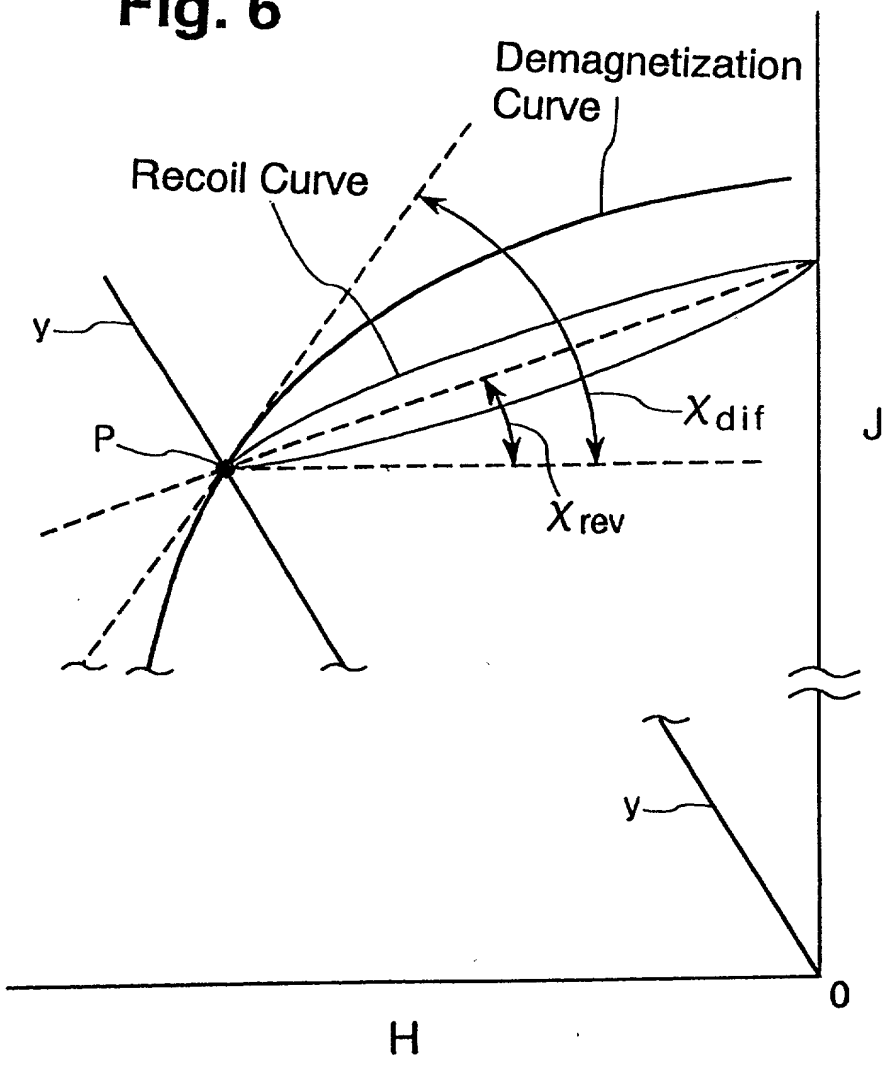
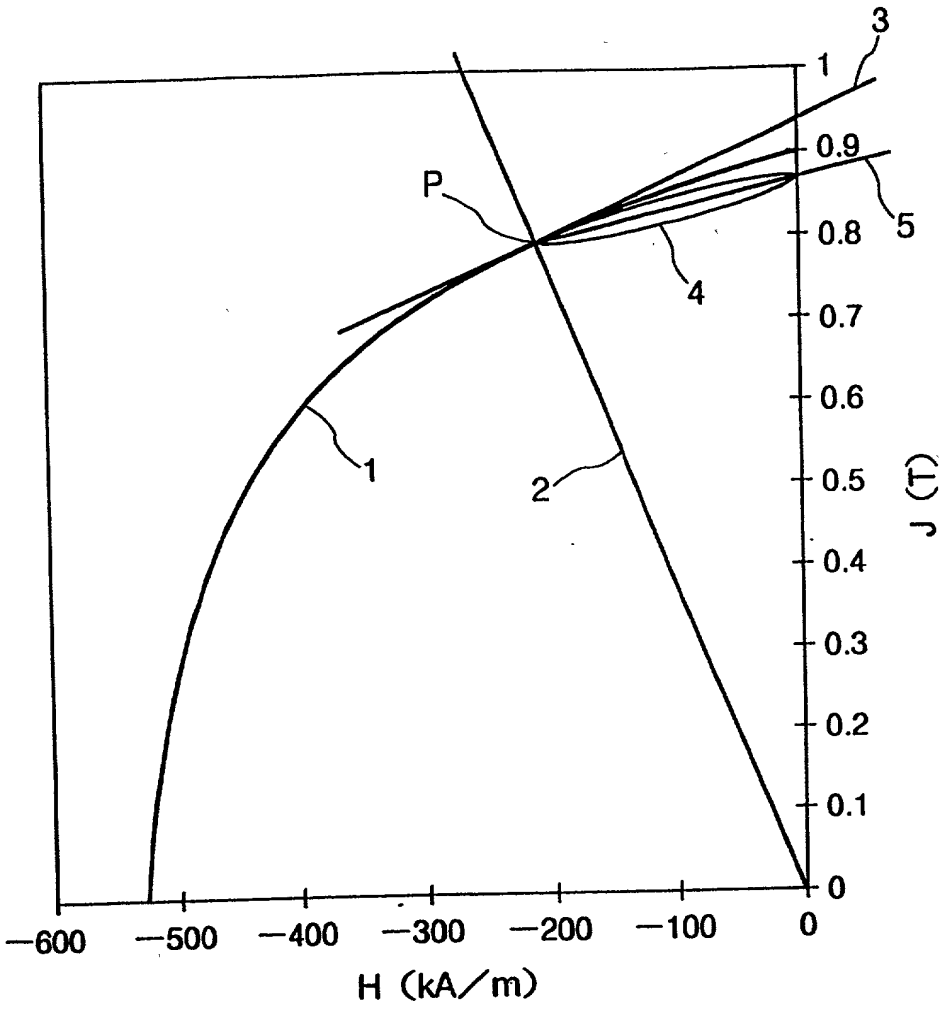


Fig. 7



No.1: Demagnetization Curve
No.2: Straight Line
Having a Gradient of -3.8×10^{-6}H/m in the J-H diagram
No.3: Tangential Line at Intersectioning Point P
No.4: Recoil Curve
No.5: Straight Line
Representing a Gradient of the Recoil Curve